

FIG. 1
(Prior Art)

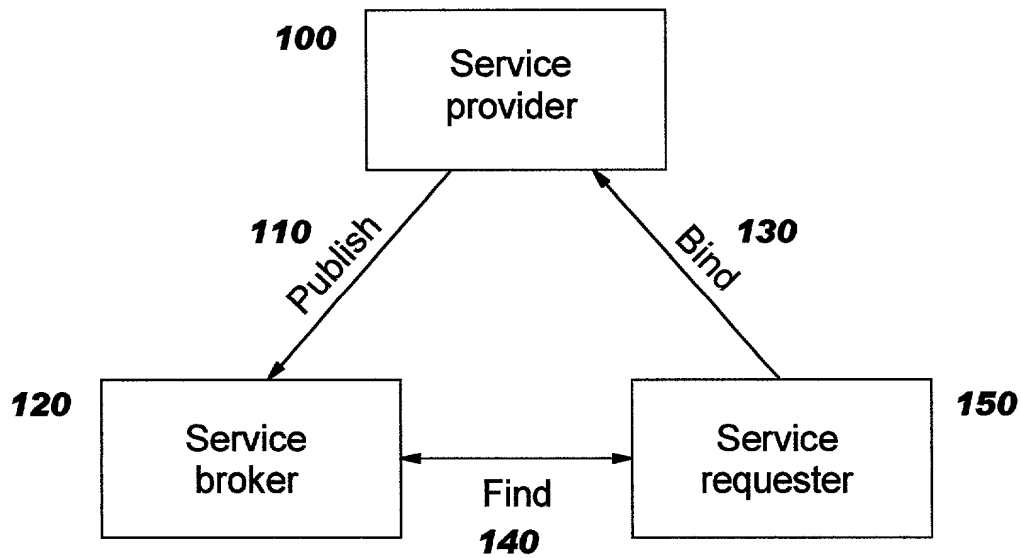


FIG. 1 (Prior Art)

FIG. 2
(PRIOR ART)

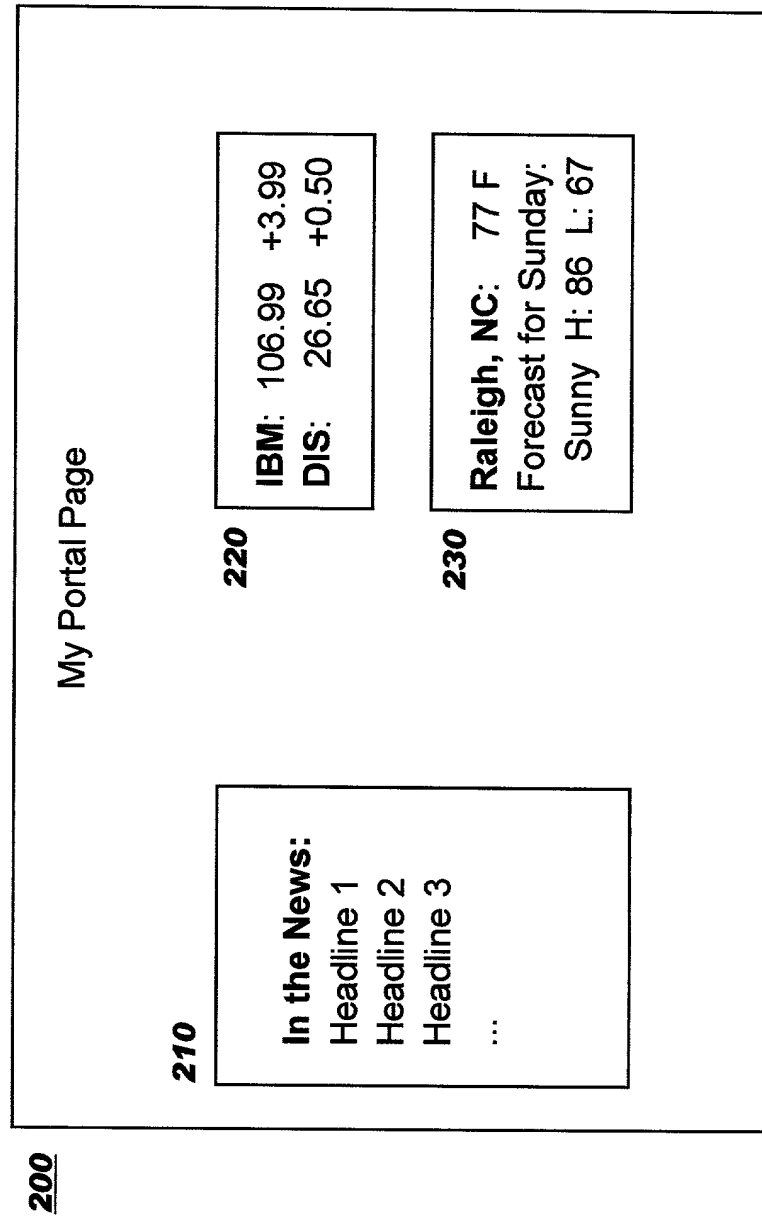


FIG. 3

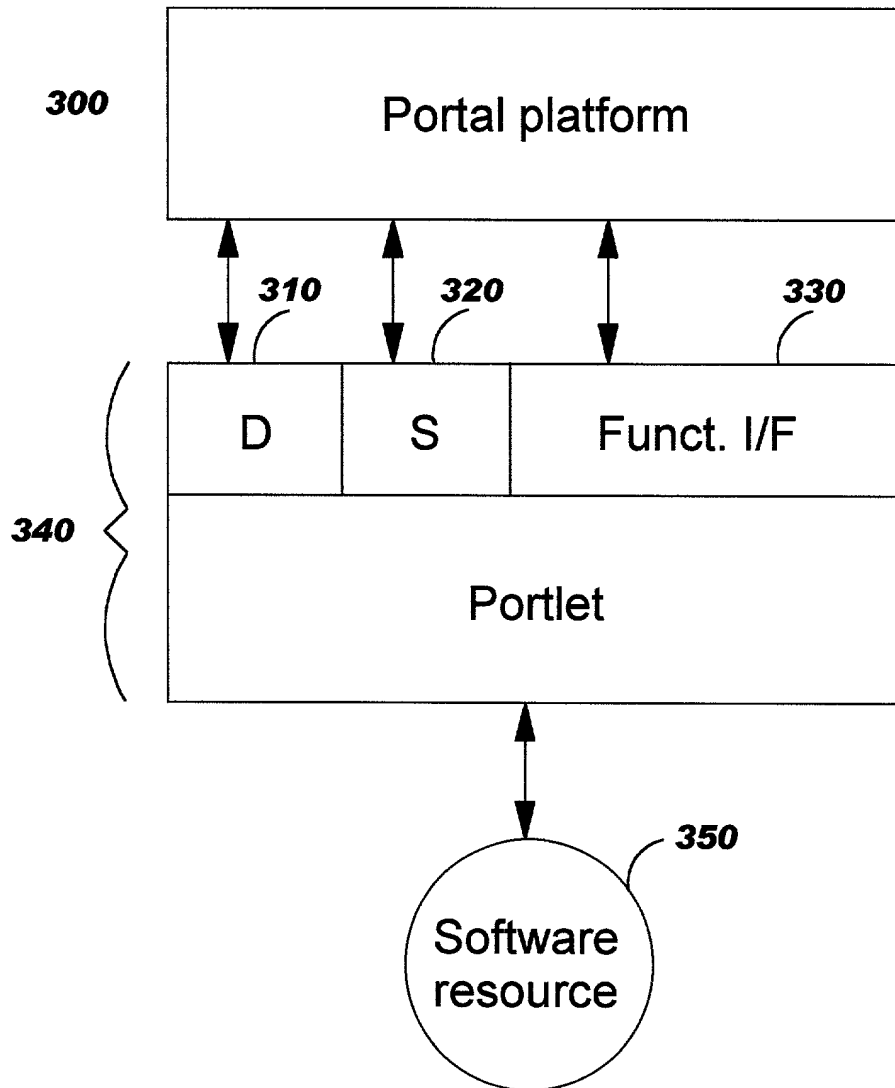


FIG. 4A

400

```
<?xml version="1.0"?>
<definitions
410   name="Deployment"
      targetNamespace="http://portal-definitions/Deployment.wsdl"
      xmlns:tns="http://portal-definitions/Deployment.wsdl"
      xmlns:wsfl="http://schemas.xmlsoap.org/wsfl/"
      xmlns="http://schemas.xmlsoap.org/wsdl/">

420   <message name="getDisplayNameInput">
        <part name="displayNameInput" element="xsd:nil"/>
    </message>
    <message name="getDisplayNameOutput">
        <part name="displayNameOutput" element="xsd:string"/>
    </message>
    <message name="getDisplayIcon16x16Input">
        <part name="displayIcon16x16Input" element="xsd:nil"/>
    </message>
    <message name="getDisplayIcon16x16Output">
        <part name="displayIcon16x16Output" element="xsd:image"/>
    </message>
    ...

430   <portType name="DeploymentPortType">
        <operation name="getName">
            <input message="tns:getDisplayNameInput"/>
            <output message="tns:getDisplayNameOutput"/>
        </operation>
        <operation name="getDisplayIcon16x16">
            <input message="tns:getDisplayIcon16x16Input"/>
            <output message="tns:getDisplayIcon16x16Output"/>
        </operation>
        ...
    </portType>
</definitions>
```

FIG. 4B1

FIG. 4B1

FIG. 4B2

FIG. 4B

450

460

```
<?xml version="1.0"?>
<definitions
  name="System"
  targetNamespace="http://portal-definitions/System.wsdl"
  xmlns:tns="http://portal-definitions/System.wsdl"
  xmlns:wsfl="http://schemas.xmlsoap.org/wsfl/"
  xmlns="http://schemas.xmlsoap.org/wsdl/">
```

470

```
<types>
  <schema xmlns="http://www.w3.org/2000/10/XMLSchema">
    <element name="Event">
      <complexType>
        <all>
          <element name="uuid" type="xsd:string"/>
          <element name="type" type="xsd:string"/>
          <element name="when" type="xsd:date"/>
        </all>
      </complexType>
    </element>
  </schema>
</types>
```

...

FIG. 4B1

FIG. 4B2

```
480 <message name="logEventReceive">
      <part name="logEventInput" element="tns:Event"/>
    </message>
    <message name="reportInput">
      <part name="reportUsageResource" element="xsd:string"/>
      <part name="reportUsageQuantity" element="xsd:integer"/>
    </message>
    <message name="reportOutput">
      <part name="reportReturnCode" element="xsd:string"/>
    </message>
    ...
490 <portType name="SystemPortType">
      <operation name="logEvent">
        <input message="tns:logEventReceive"/>
      </operation>
      <operation name="reportUsage">
        <input message="tns:reportInput"/>
        <output message="tns:reportOutput"/>
      </operation/>
    ...
  </portType>
  ...
</definitions>
```

FIG. 4B2

FIG. 5

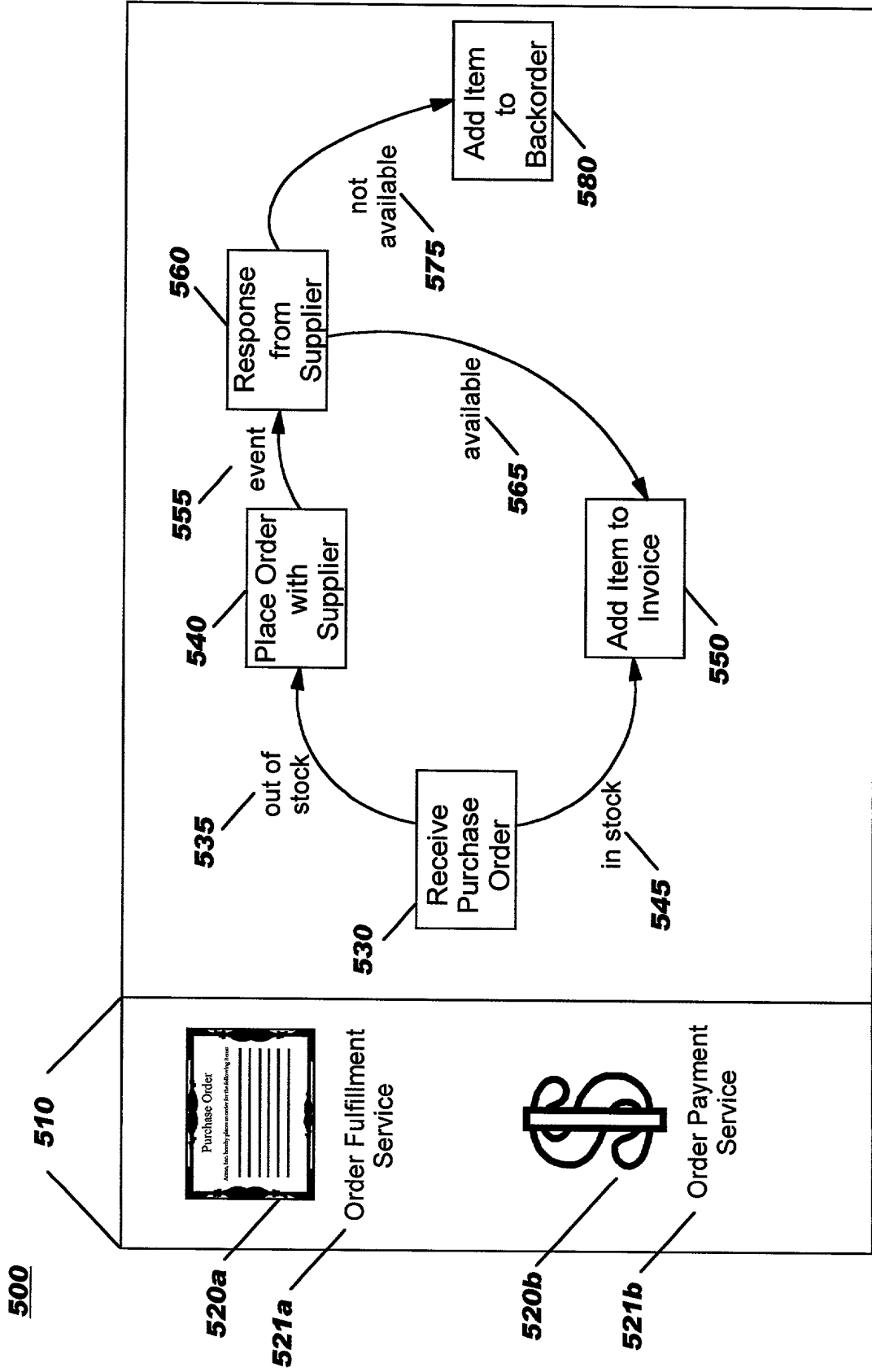


FIG. 6

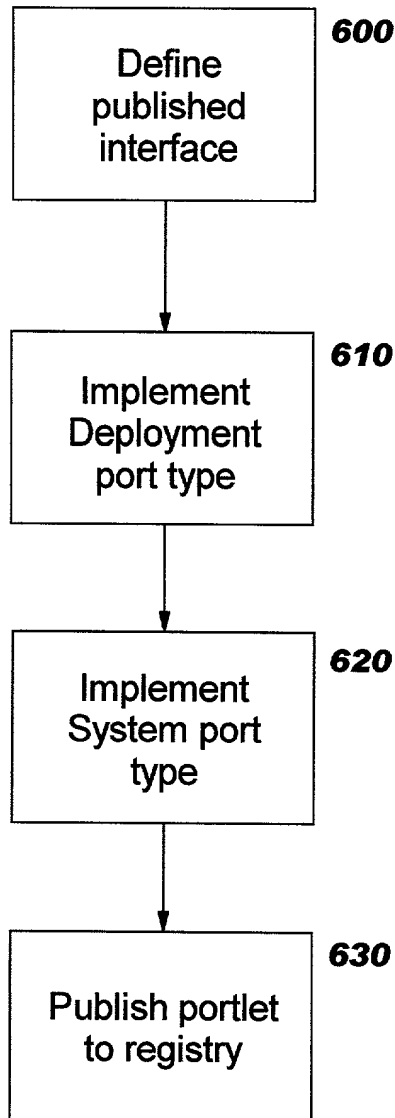


FIG. 6

FIG. 7

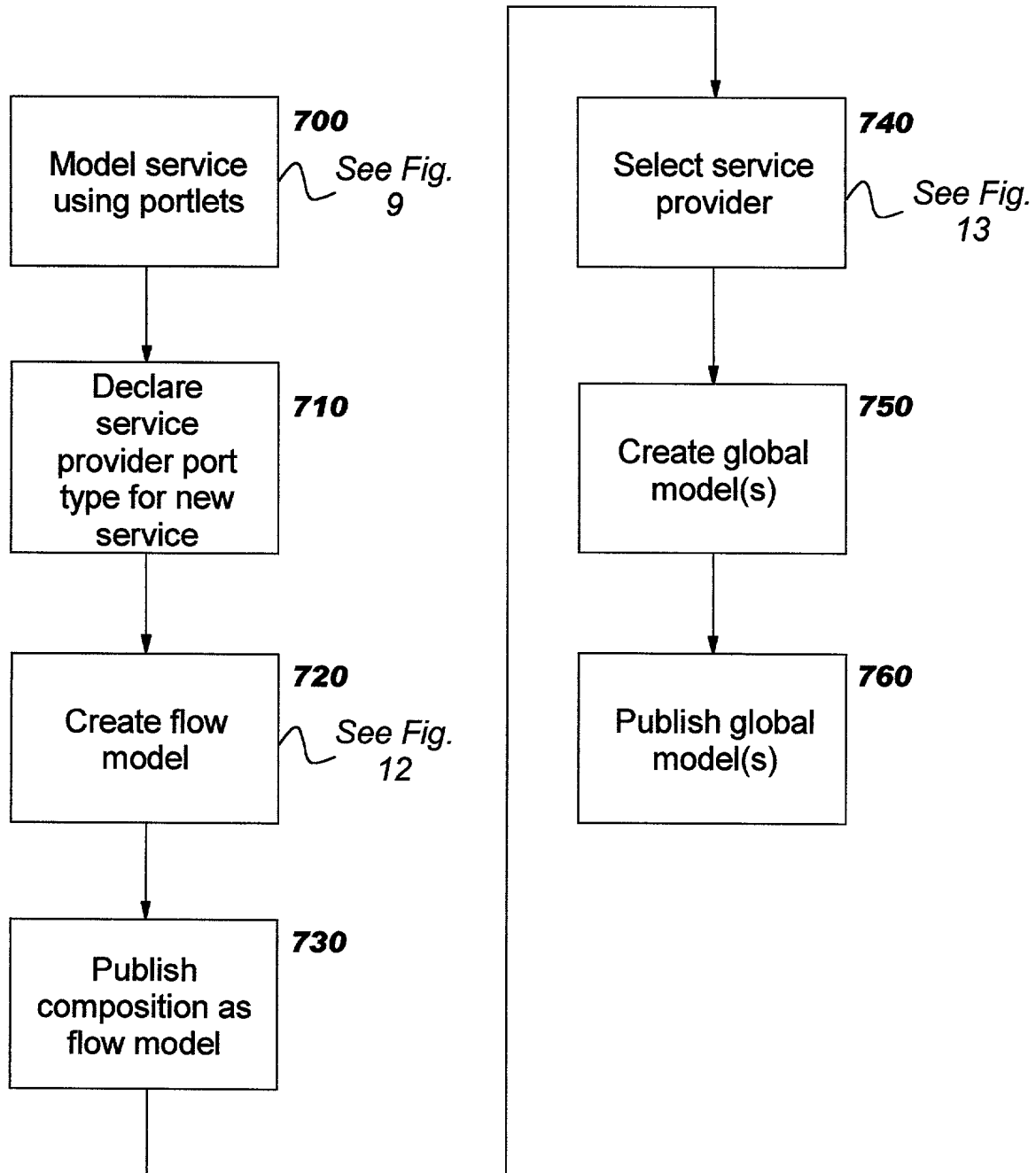


FIG. 8

800

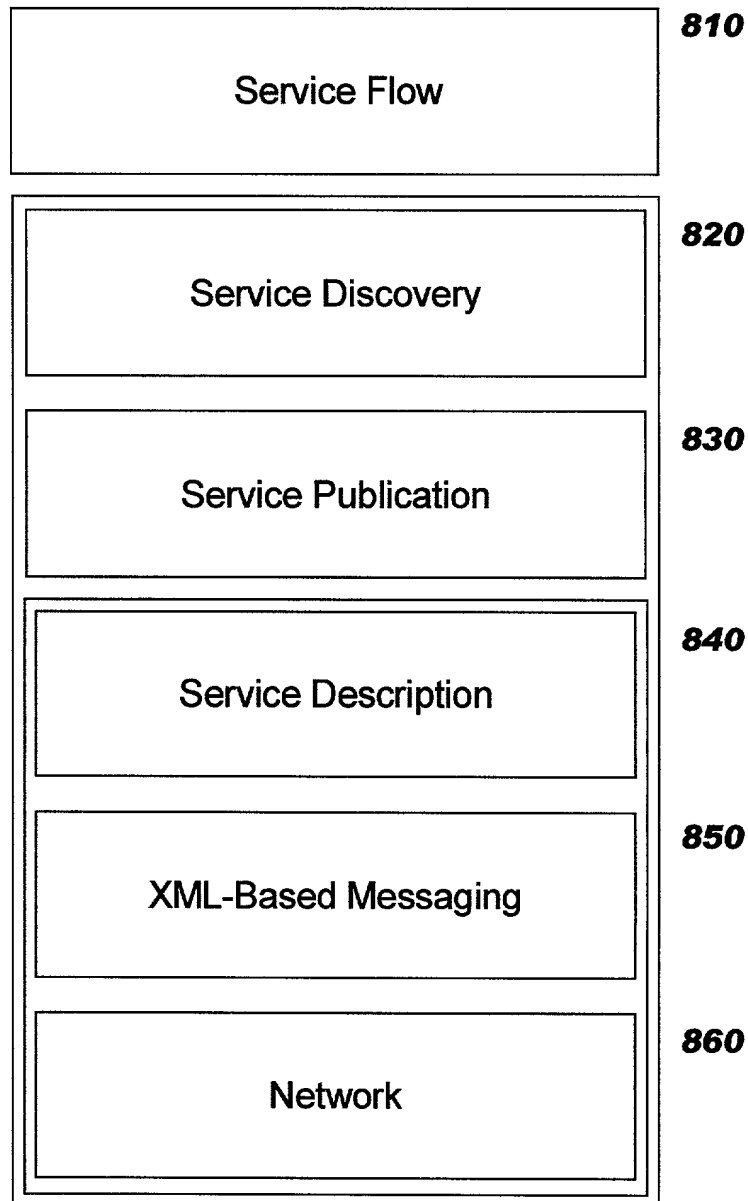


FIG. 9

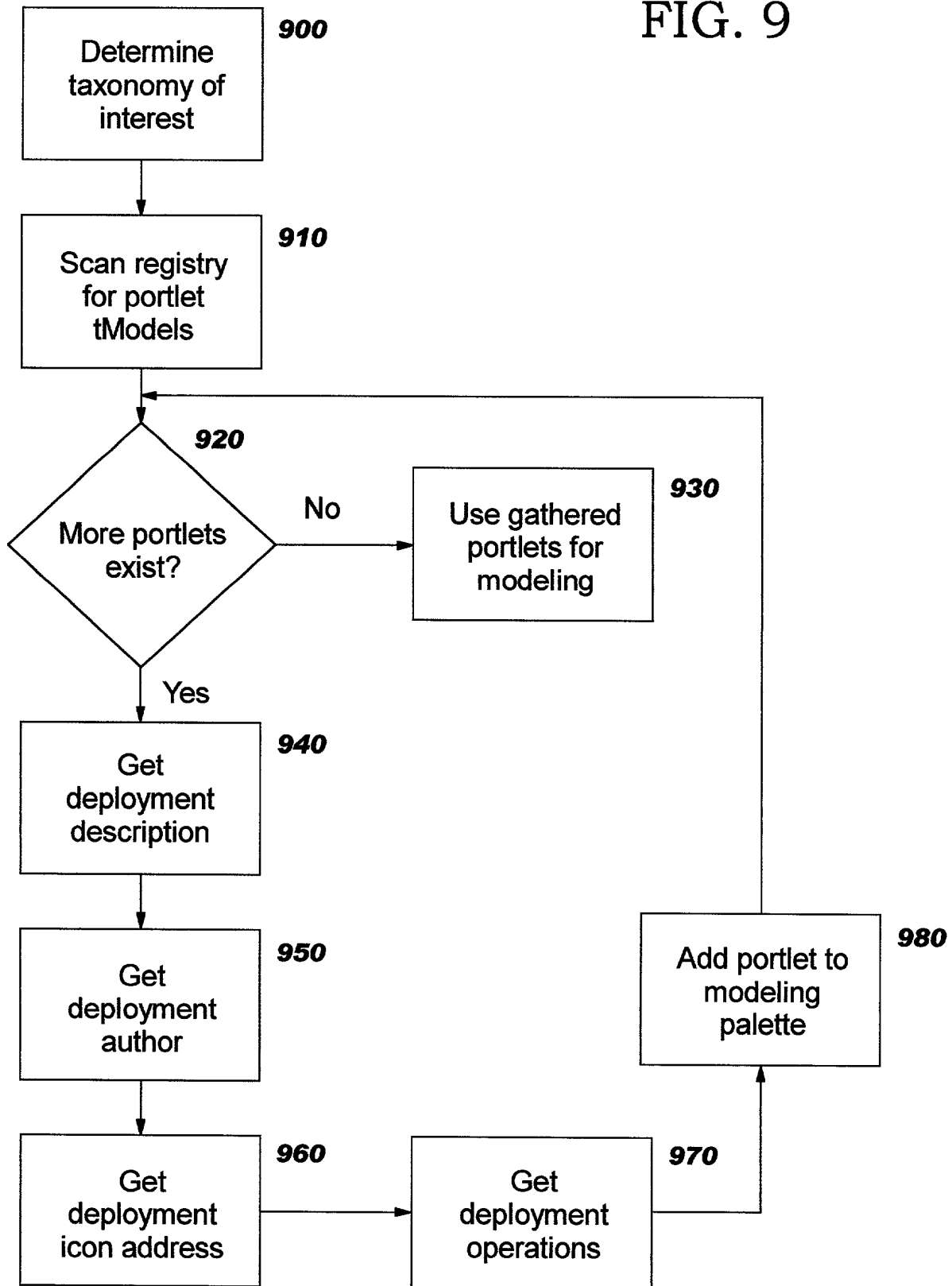


FIG. 10

1000

```
<tModel authorizedName="..."
  operator="..."
  tModelKey="uuid:12-4-4-8">
  <name>System Service</name>
  <description xml:lang="en">
    WSDL for System Definition.
  </description>
  <overviewDoc>
    <description xml:lang="en"
      WSDL Source Document.
    </description>
    <overviewURL>
      http://portal-definitions/System.wsdl
    </overviewURL>
  </overviewDoc>
  <categoryBag>
    <keyedReferece tModelKey="uuid:12-4-4-8"
      keyName="uddi-org:types"
      keyValue="wsdlSpec"/>
  </categoryBag>
</tModel>
```

1010

1020

"8345550" 150T040

FIG. 11A

public integer processCreditTransaction
(Integer cardNumber, float purchaseAmount, date expirationDate)

FIG. 11B

public Boolean acceptCreditCard
(String accountNumber, string cardHolderName,
float currentAmount, float outstandingBalance, date expirationDate)

FIG. 11C

public Boolean creditCardService
(String accountNumber, integer cardNumber,
string cardHolderName, float amount, float outstandingBalance,
date expirationDate)

FIG. 12

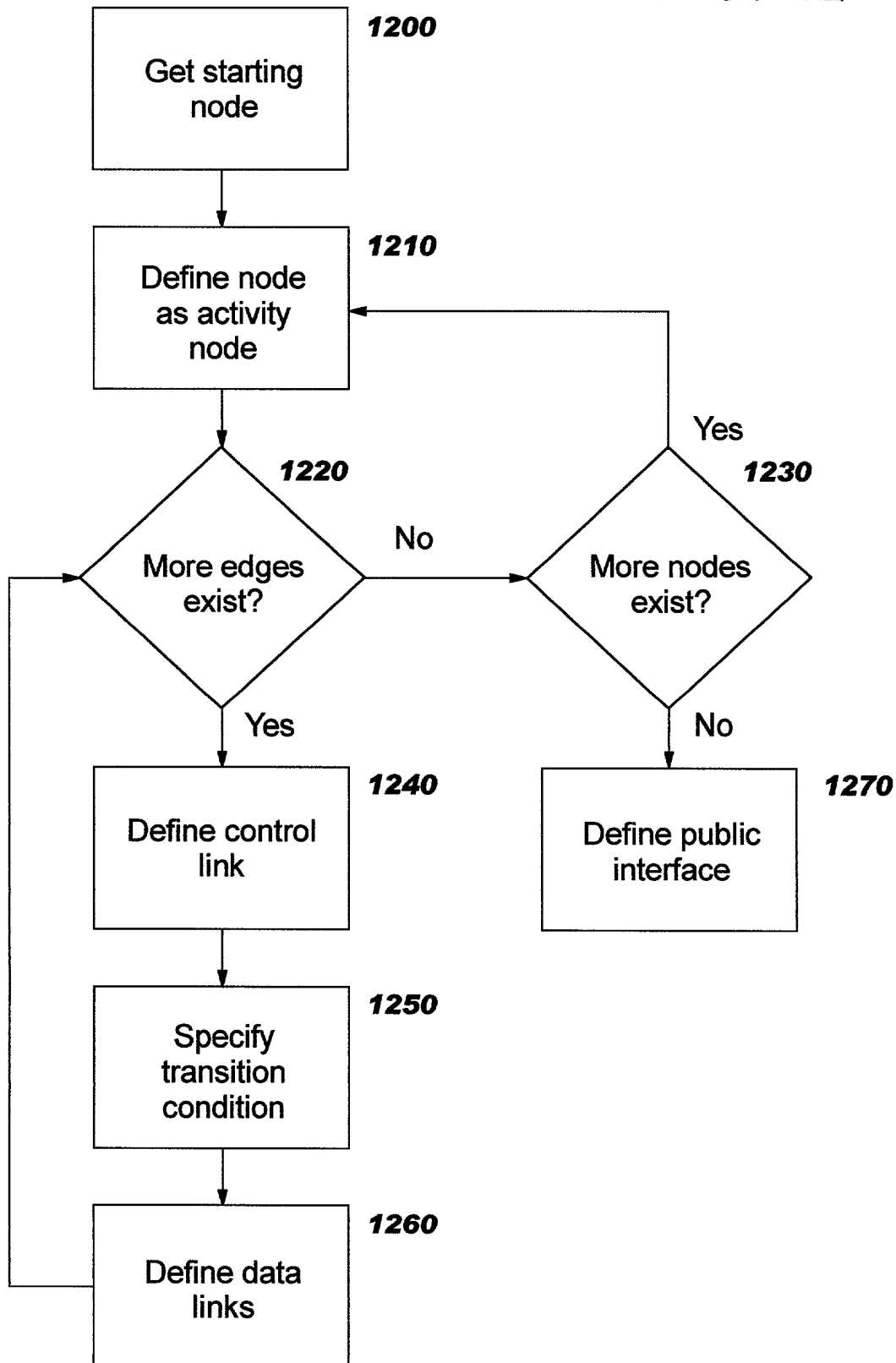


FIG. 13

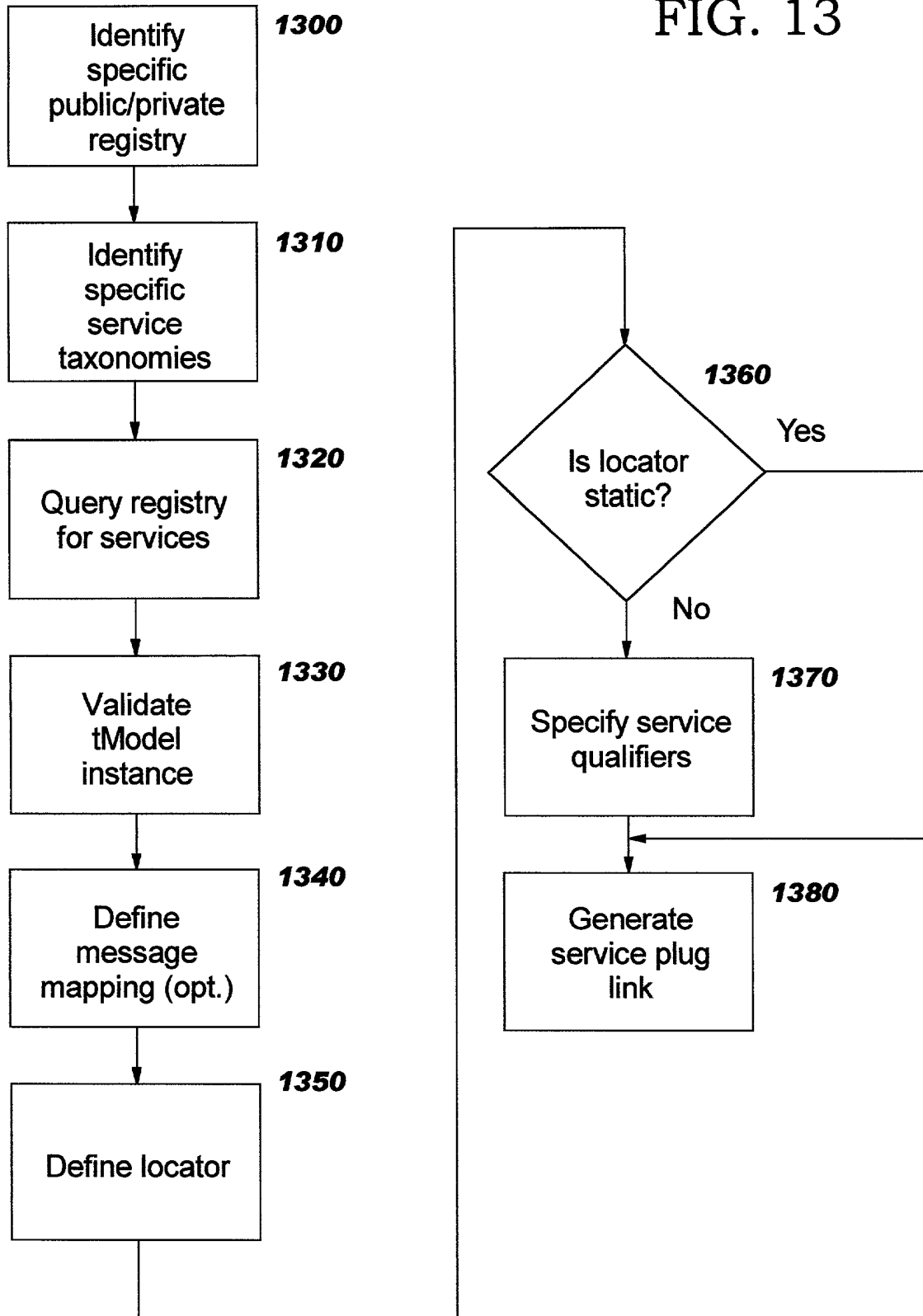


FIG. 13

FIG. 14

1400

1410

```
<plugLink>
  <source serviceProvider="serviceSend"
    portType="sendPortType"
    operation="send"/>
  <target serviceProvider="serviceReceive"
    portType="receivePortType"
    operation="receive"/>
  <map sourceMessage="sendForm"
    targetMessage="receiveForm"/>
  <locator type="static"
    service="TheServiceReceiver.com"/>
</plugLink>
```


FIG. 15A

1500

```
<result>  
  <firstName>Mike</firstName>  
  <lastName>Wanderski</lastName>  
</result>
```

FIG. 15B

1520

```
<map sourceMessage="theSourceMessage"  
  targetMessage="submitNameMessage"  
  sourcePart="firstName"  
  targetPart="name"/>
```

FIG. 15C

```
<map sourceMessage="wsSourceMessage"  
  targetMessage="submitNameMessage"  
  converter="urn:thePortalURN"/>
```

FIG. 16

1600

1610

From	To	Convert-let
portlet-A portlet-A portlet-B ...	portlet-B portlet-C portlet-Z ...	A-to-B A-to-C B-to-Z ...

FIG. 17

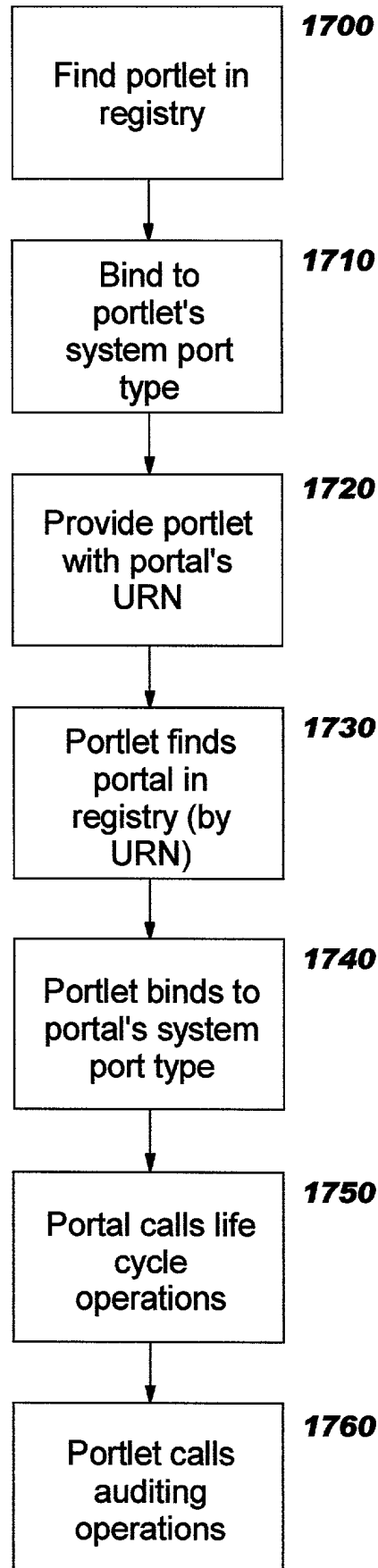


FIG. 17

FIG. 18

